

High Level Motion Processing: Computational, Neurobiological, and Psychophysical Perspectives. Edited by Takeo Watanabe. MIT Press, Cambridge, MA. (1998). 417 pages. \$60.00.

Contents:

Introduction. I. Interactive aspects of motion. Introduction (Takeo Watanabe). 1. How is a moving target continuously tracked behind occluding cover? (Stephen Grossberg). 2. The influence of chromatic information on visual motion processing in the primate visual system (Karen R. Dobkins and Thomas D. Albright). 3. Roles of attention and form in visual motion processing: Psychophysical and brain-imaging studies (Takeo Watanabe and Satoru Miyauchi). 4. D_{\max} : Relations to low- and high-level motion processes (Takeo Sato). 5. A systems analysis of visual motion perception (George Sperling and Zhong-Lin Lu). II. Motion coherence and grouping. Introduction (Norberto M. Grzywacz). 6. A theoretical framework for visual motion (Alan L. Yuille and Norberto M. Grzywacz). 7. Perception of motion discontinuities in patients with selective motion deficits (Lucia M. Vaina, Norberto M. Grzywacz, Marjorie LeMay, Don Bienfang and Edward Wolpaw). 8. The role of parsing in high-level motion processing (Peter Tse, Patrick Cavanagh and Ken Nakayama). III. Heading and structure from motion. Introduction (Takeo Watanabe). 9. Computing observer motion from optical flow (Ellen C. Hildreth and Constance S. Royden). 10. Representation of visual motion in the extrastriate visual cortex (Keiji Tanaka). 11. The state of flow (William H. Warren, Jr.). 12. Theoretical and biological limitations on the visual perception of three-dimensional structure from motion (James T. Todd). Conclusion. Some questions; some answers, some speculations, some concerns (William R. Uttal). Contributors. Name index. Subject index.

Initial Approximations and Root Finding Methods. By Nikolay Kyurkchiev. Wiley-VCH Verlag, Berlin. (1998). 180 pages. \$45.00.

Contents:

1. Computation of polynomial zeros. 2. Generalized root iteration. 3. Recursively generated iterative methods. 4. Two-sided and multi-point methods. 5. Factorization of a polynomial. 6. On some methods for the determination of all zeros. 7. On the zeros of polynomials. 8. Contraction of the SOR Weierstrauss method. 9. On the critical points of Aberth's method. 10. A note on the Le Verrier-Fadeev method. Subject index.

Inside the Database Object Model. By Donald K. Burleson. CRC Press, Boca Raton, FL. (1999). 226 pages. \$69.95, DM 135.00, öS 986.00, sFr 123.00, GBP 52.00.

Contents:

Preface. 1. The history and evolution of object technology. 2. The history of database management and object management. 3. Database object analysis & design. 4. An overview of object database standards. 5. Relational database objects and abstract data types. 6. Relational database objects and pointers. 7. Database objects and inheritance. 8. Methods and database objects. 9. SQL and relational databases. 10. Interfacing C++ with relational databases. 11. Summary and future trends. Appendix A. Original C++ application. Index.

Graphics Programming in C++. By Mark Walmsley. Springer-Verlag, London. (1998). 250 pages. \$54.95, DM 89.00, öS 650.00, sFr 81.00, GBP 29.50.

Contents:

Preface. 1. Message-based programming. 2. Window management. 3. Object orientation. 4. Pens and brushes. 5. Bitmaps. 6. Palettes. 7. Sprite animation. 8. Wire-frame graphics. 9. Polygon-fill techniques. 10. Assembly language programming. 11. Mathematics of 3D geometry. 12. Projection of the viewing volume. 13. Hidden pixel removal. 14. Colour shading and textures. 15. In motion. Postscript. Index.

Data, Statistics, and Decision Models with Excel. By Donald L. Harnett and James F. Horrell. John Wiley & Sons, Inc., New York. (1998). 605 pages. \$93.95 (2 diskettes included).

Contents:

Preface. 1. Introduction to quantitative decision making. 2. Discrete probability and decision analysis. 3. Decision making with binomial and normal probabilities. 4. Decisions based on sample statistics. 5. Sample design and estimation. 6. Decisions based on linear relationships. 7. Hypothesis testing. 8. Quality control. 9. Forecasting. 10. Analysis of variance. 11. Simulation. 12. Linear programming. 13. Appendices. A. Algebra review. B. Selected Excel commands. Data disk files. Selected references. Answers to even-numbered problems. Index.

A History of the Modern Fact: Problems of Knowledge in the Sciences of Wealth and Society. By Mary Poovey. University of Chicago Press, Chicago. (1998). 419 pages. \$49.00, £39.25 (cloth); \$17.00, £13.50 (paper).

Contents:

Acknowledgments. Introduction. 1. The modern fact, the problem of induction, and questions of method. 2. Accommodating merchants: Double-entry bookkeeping, mercantile expertise, and the effect of accuracy. 3. The political anatomy of the economy: English science and Irish land. 4. Experimental moral philosophy and the problems of liberal governmentality. 5. From conjectural history to political economy. 6. Reconfiguring facts and theory: Vestiges of providentialism in the new science of wealth. 7. Figures of arithmetic, figures of speech: The problem of induction in the 1830s. Notes. Bibliography. Index.